AMENDMENTS

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

1. (Withdrawn) A method for producing a plant with modified gene expression, comprising stable integration of a seed specific regulatory sequence or a fragment or derivative thereof, provided said fragment or derivative controls specifically the expression of genes in the seed, and a nucleic acid sequence encoding a gene product wherein the nucleic acid sequence is functionally linked to said seed specific regulatory sequence or the fragment or derivative thereof, into the genome of plant cells or plant tissues and regeneration of the obtained plant cells or plant tissues to plants.

2. (Withdrawn) Method according to claim 1, wherein said gene expression is enhanced or reduced.

3. (Withdrawn) Method according to claim 1 or 2, wherein for said nucleic acid sequence encoding a gene product an endogeneous or exogeneous nucleic acid sequence is used.

4. (Withdrawn) Method according to anyone claims 1-3, wherein for said nucleic acid sequence encoding a gene product a nucleic acid sequence selected from the group of genes of the phenyl propanoid metabolism, seed specific genes, seed coat-specific genes or genes of the general metabolism is used.

5. (Withdrawn) Method according to claim 4, wherein for said genes of the phenylpropanoid metabolism a nucleic acid sequence selected from the group of genes for phenylalanine ammonia-lyase, cinnamate 4-hydroxylase, 4-coumarate-coA ligase, chalcone synthase, chalcone isomerase, chalcone reductase, flavanone 3-hydroxylase, flavonoid-3'-hydroxylase, flavonoid-3'5'-hydroxylase, dihydroflavono-4-reductase,

leucoanthocyanidin reductase, leucoanthocyanidin dioxygenase, 3'-glucosyltransferase, 5'-glucosyltransferase and O-methyl transferase.

6. (Withdrawn) Method according to claim 4, wherein for said seed-specific genes a nucleic acid sequence is used selected from the group of genes influencing germ tendency or dormancy, or pathogen resistance, or the TT1 gene according to SEQ ID NO:2 and SEQ ID NO:4.

7. (Withdrawn) Method according to claim 4, wherein for said genes of the general metabolism a nucleic acid sequence is used selected from the group of genes for ADP glucose synthethase, starch synthase, ADP glucose pyrophosphorylase and yeast invertase.

8. (Withdrawn) Method according to anyone of claims 1 to 7, wherein for said seed-specific regulatory sequence the nucleic acid sequence according to SEQ ID NO:1 or a fragment or derivative thereof is used.

9. (Withdrawn) Transformed plant cell or transformed plant tissue, characterised in that a seed specific regulatory sequence or a fragment or derivative thereof and a nucleic acid sequence encoding a gene product wherein the nucleic acid sequence is functionally linked to said seed specific regulatory sequence or a fragment or derivative thereof is stable incorporated into the genome of the plant cell or the plant tissue.

10. (Withdrawn) Nucleic acid sequence according to SEQ ID NO:1.

11. (Withdrawn) Fragment or derivative of the nucleic acid sequence according to claim 10 or a nucleic acid sequence which hybridizes with the nucleic acid sequence according SEQ ID NO:1 and is responsible for the seed specific expression.

12. (Withdrawn) Nucleic acid sequence according to claim 11, wherein the hybridizing nucleic acid sequence hybridizes with the nucleic acid sequence according SEQ ID NO:1 under stringent conditions.

13. (Currently amended) A method for producing a plant comprising stably integrating into the genome of a plant cell a nucleic acid sequence comprising SEQ ID NO:2 or 4, or of a fragment or ~~homologue~~homolog thereof that hybridizes under stringent conditions to SEQ ID NO:2 or 4, and regenerating the plant cell to produce a plant, wherein said stringent conditions are defined as hybridization in 4 x SSC at 65° C, or in 50% formamide and 4 X SSC at 42° C, followed by washing in 0.1 x SSC at 65°C for one hour, and wherein said plant exhibits an enhanced or reduced flavonoid content a compared to plants not comprising said nucleic acid sequence.

14. (Previously presented) The method according to claim 13, whereby the integrated nucleic acid sequence or fragment or homolog thereof is expressed in sense or antisense orientation compared to the endogenous nucleic acid sequence.

15. (Canceled)

16. (Previously presented) The method according to claim 13 or 14, wherein the nucleic acid sequence or fragment or homolog thereof is integrated into the genomic region of the homologous endogenous gene.

17. (Currently amended) The method according to ~~anyone of claims~~claim 13, 14 ~~to~~or 16, wherein the nucleic acid sequence or fragment or homolog thereof is functionally linked to a regulatory DNA sequence, which controls the expression of the integrated nucleic acid sequence or fragment or homolog thereof.

18. (Previously presented) The method according to claim 17, wherein the regulatory DNA sequence is selected from the group of promoters CaMV 35S promoter, PRPI promoter, phaseolin promoter, isoflavone reductase promoter, ST-LSI promoter, salicylic acid

inducible promoter, benzenesulfonamide inducible promoter, tetracycline inducible promoter, abscisic acid inducible promoter, ethanol or cyclohexanone inducible promoter, promoter according to SEQ ID NO:1 or a seed specific promoter from tobacco.

19. (Previously presented) A purified and isolated nucleic acid sequence comprising SEQ ID NO:2 or 4.

20. (Currently amended) A fragment of the nucleic acid sequence according to SEQ ID NO:2 or 4, or a homologous nucleic acid sequence which hybridizes to the nucleic acid sequence according to SEQ ID NO:2 or 4 under stringent conditions, wherein said stringent conditions are defined as hybridization in 4 x SSC at 65° C, or in 50% formamide and 4 X SSC at 42° C, followed by washing in 0.1 x SSC at 65°C for one hour, and wherein the fragment of the is responsible for the enhanced or reduced formation of flavonoids.

21. (Canceled)

22. (Previously presented) A transformed plant cell or transformed plant tissue, characterized in that the nucleic acid sequence, fragment or homolog according to claims 19 or 20 is stably integrated into the genome of the plant cell or plant tissue.

23. (Withdrawn) Amino acid sequence as listed in SEQ ID NO:3.

24. (Canceled)

25. (Previously presented) A plant obtainable according to anyone of claims 13 to 18.

26. (Currently amended) A seed obtained from a plant according to claim 25, wherein said seed comprises a transgene comprising SEQ ID NO:2 or 4, or fragment or ~~homologue~~homolog thereof that hybridizes under stringent conditions to SEQ ID NO:2 or 4.

27. (Previously presented) A vector comprising a nucleic acid sequence according to claims 19 or 20.

28. (Withdrawn) Transgenic plant with a stable into the genome integrated seed specific regulatory nucleic acid sequence according to SEQ ID NO:1, or a fragment or derivative or homolog thereof with the biological function of a seed specific promoter, and a nucleic acid sequence encoding a gene product functionally linked to said seed specific regulatory nucleic acid sequence.

29. (Currently amended) A transgenic plant with a stably integrated nucleic acid sequence comprising SEQ ID NO:2 or 4 or a homologous nucleic acid sequence thereto, or a fragment or homolog thereof that hybridizes under stringent conditions to SEQ ID NO:2 or 4, wherein said stringent conditions are defined as hybridization in 4 x SSC at 65° C, or in 50% formamide and 4 X SSC at 42° C, followed by washing in 0.1 x SSC at 65°C for one hour, and wherein said plant exhibits an enhanced or reduced flavonoid content a compared to plants not comprising said nucleic acid sequence.

30. (Currently Amended) The transgenic plant according to claim 29, wherein the nucleic acid sequence or fragment or homolog thereof is functionally linked to a regulatory DNA sequence that controls the expression of the integrated nucleic acid sequence or [[a]] fragment or homolog thereof.